

## CLAIMS

What is claimed is:

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1. An apparatus for guiding a flexible hole-drilling instrument to an obstructed area of a surface, comprising:

a body;

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an inlet aperture for inserting the flexible hole-drilling instrument;

an exit aperture; and

a raceway extending between said inlet and exit apertures,

wherein said raceway has a cross sectional area and is

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nonlinear.

2. The apparatus of claim 1 further comprising:

a face substantially conforming to the obstructed area of the surface.

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3. The apparatus of claim 2 wherein:

said exit aperture is located on said substantially conforming face.

4. The apparatus of claim 3 further comprising:

a locating feature for accurately locating said exit aperture in relation to the obstructed area of the surface.

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5. The apparatus of claim 4 wherein:

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said raceway cross sectional area is circular.

6. The apparatus of claim 5 wherein:

said raceway is coated with an electrical insulating material.

7. A method for drilling a hole in an obstructed area of a surface,  
comprising:

- 5           (a)        locating an apparatus for guiding a flexible hole-  
                  drilling instrument in proximity to the obstructed  
                  area of the surface;
- (b)        guiding said instrument with said apparatus so that said  
                  instrument follows a nonlinear path; and
- 10          (c)        drilling a hole into the obstructed area of the surface.

8. The method of claim 7 wherein the flexible hole-drilling instrument  
is an electrodischarge machining electrode.

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